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REMARKS

Claim 1 was amended to more particularly point out and distinctly claim the subject matter of claim 1.

Claims 9 and 15 were amended to place the claims in condition for allowance as indicated further hereinafter.

Claims 4, 5, 6, and 8 were amended to provide proper antecedent.

Claims 10 and 17 are cancelled.

The title of the application was amended as requested in the Office Action.

Allowable Subject Matter:

The Office Action states that claims 10 and 17 were objected to as being depend upon a rejected base claim but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.

By this amendment, claim 9 is amended to incorporate the limitations of prior claim 10 into claim 9 and place claim 9 in condition for allowance. It is believed that this amendment to claim 9 places claim 9 in condition for allowance by incorporating the limitations of claim 10 as stated in the Office Action.

By this amendment, claim 15 is amended to incorporate the limitations of prior claim 17 and place claim 15 in condition for allowance. It is believed that this amendment to claim 15 places claim 15 in condition for allowance by incorporating the limitations of claim 17 as stated in the Office Action.

Objection to the drawings:

The drawings were objected to because they failed to label what the element boxes 11, 81, 80, 60, 71, 19, and 22 are. The

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objection continues by referring to MPEP 608.02 sup-  
paragraph(o) - Legends.

The cited section of the MPEP regarding Legends as stated in the Office Action was not found in the current version of the MPEP dated May 2004. Perhaps the cited section refers to a previous version of the MPEP in which the cited section may be in a different sub-paragraph or may have been deleted. Applicants respectfully request clarification of the MPEP section which provides a basis for the objection to the drawings.

The objected to boxes 11, 60, 71, 19, and 22 are merely dashed lines or dashed boxes that are used to group some of the elements of the figures together. These groups all have details schematics within the dashed lines that are shown in the drawings. Furthermore, each of these groups and the elements within them are explained in detail in the specification and are referenced by the reference numbers attached to the dashed line groupings. It is respectfully submitted that adding legends to these dashed boxes would be more confusing than the current status of the drawings.

Boxes 80 and 81 are clearly described in the specification on page 13, lines 26-31 as being a schematic illustration of a plan view of a semiconductor die 81 on which controller 11 (that is clearly described in the description of FIG. 1) is formed. It is respectfully submitted that no symbols are necessary or required nor should they be required by the examiner for plan views of semiconductor die, thus, are not required for the illustration of FIG. 4.

Accordingly, it is respectfully submitted that the objection to the drawing should be withdrawn.

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Objection to the Title:

The Office Action states that the title of the invention is not descriptive and that a new title is required and continues on to indicate a new title. Applicants respectfully submit that the title of the application as filed was clearly descriptive of the subject matter of the application and that a new title is not required. However, in the spirit of cooperation, the title is amended to the title indicated in the Office Action.

Objection to the Claims:

Claims 4, 6, and 7 were objected to because of informalities and particularly for misspelling of the word linear in claim 4. It is believed that the amendments to claim 4 now overcome this objection to the claims.

35 USC 102 Rejection:

Claims 1, 2, 4-9, 11-12, 14-16, 18, and 20 were rejected under 35 U.S.C. 102(b) over United States patent number 5,764,460 issued to Perillo et al. This objection is respectfully traversed.

Amended claim 1 includes a combination of elements that when viewed as a whole are not disclosed by Perillo et al. The combination includes, among other elements, receive an input voltage having a waveform of a rectified sine wave having a non-zero period for each cycle of the waveform, configuring a power supply controller to generate a load current through the load during a portion of a cycle of the input voltage, and configuring the power supply controller to determine an average value of the load current, determine a difference between the average value of the load current and a desired average value, and use the difference and an instantaneous value of the load

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current to control the instantaneous value of the load current during the portion of the cycle to regulate the average value of the load current over the period to the desired average value of the load current. At least this combination of elements is not disclosed by the Perillo et al reference. The Perillo et al reference does not receive an input voltage having a rectified sine wave waveform with a non-zero period. The Office Action states that the Perillo et al reference receives an input voltage having a period of zero. However, a waveform having a period of zero does not have a period therefore, Perillo et al does not disclose a waveform having a period and certainly does not disclose a rectified sine wave having a non-zero period. It is believed that such a use of the term period is repugnant to the definition of period. Please refer to Webster's Ninth New Collegiate Dictionary where a period can be the interval of time for a cyclic motion or phenomenon to complete a cycle and begin to repeat itself. Perhaps the Office Action may be stating that such a period is inherent, however, it is respectfully submitted that inherency may not be established by probabilities or possibilities and the mere fact that a certain thing may result from a given set of circumstances is not sufficient to establish inherency. Further, the protection circuit of the Perillo et al reference is not configured to determine an average value of a load current over the cycle but merely uses an instantaneous value of the load current. Additionally, the Perillo et al reference does not determine a difference between the average value of the load current and the desired average value and does not use the difference in addition to an instantaneous value of the load current to control the instantaneous value of the load current and certainly does not perform such a function during the portion of the cycle that is defined within claim 1. Perillo et al further do not use such a difference to regulate

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an average value of the load current over the period to the desired average value of the load current. It is respectfully submitted that when viewed as whole, these elements of claim 1 are not disclosed by the Perillo et al reference. Accordingly, it is respectfully submitted that the relied on reference is deficient in anticipating amended claim 1.

Claims 2 and 4-8 depend from claim 1 and are believed to be allowable for least the same reasons as amended claim 1.

Regarding claim 4, the Office Action indicates that the Perillo et al regulator will because of time delays overshoot and undershoot the desired value and thus reach a desired average value of current over a defined time period. However, it is respectfully submitted that Perillo et al do not control the average value of the load current as required by claims 1 and 4. Perillo et al merely use the instantaneous value of the current through element Power to determine the point at which the Power element is disabled. Thus, it is respectfully submitted that the Perillo et al reference does not disclose these elements of claim 4. It should be noted again that inherency may not be established by probabilities or possibilities and the mere fact that a certain thing may result from a given set of circumstances is not sufficient to establish inherency.

Regarding claim 6, the Office Action refers to the Office Action statement of claim 4. As indicated hereinbefore relative to claim 4, the Perillo et al reference does not establish an average value of the load current and does not establish an averaged signal that is representative of an average value of load current over the cycle. Accordingly, it is respectfully submitted that the relied on reference cannot anticipate at least these elements of claims 4 and 6.

Claim 7 includes, generate a deviation signal representative of the difference between the averaged signal.

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The office action refers to an averaged signal between Ra and Rb. However, such is not an average signal that is representative of an average value of the load current over the cycle. The signal referred to in the Office action is merely a voltage that is at a value determined by a resistor divider. It is NOT an average value of the load current over the cycle as called out in claim 6. It is respectfully submitted that all the limitations of a claim must be included when examining the claim. To omit the average value of the load current over the cycle as called out in claim 6 and only use the term "average value" in isolation does not follow the practice of including all limitations. Accordingly, it is respectfully submitted that claim 7 can not be anticipated by the relied on reference.

Even further, amended claim 8 includes forming the power supply controller to generate the load current each cycle when the input voltage is greater than the first voltage value and less than the second voltage. The Perillo et al reference is silent on generating the load current each cycle much less each cycle when the input voltage is between the first and second value. Accordingly, it is respectfully submitted that the relied on reference does not anticipate claim 8.

Claim 9 was amended to place claim 9 in condition for allowance as stated in the Office Action and stated hereinbefore. Thus, it is respectfully submitted that claim 9 is now allowable.

Claims 11, 12, and 14 depend from now allowable claim 9 and are believed to be allowable for at least the same reasons as claim 9.

Claim 15 was amended to place claim 15 in condition for allowance as stated in the Office Action and hereinbefore in

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this amendment. Thus, it is respectfully submitted that claim 15 is now allowable.

Claims 16, 18, and 20 depend from now allowable claim 15 and are believed to be allowable for least the same reasons as claim 15.

35 USC 103 Rejection:

Claims 3 and 19 were rejected under 35 U.S.C. 103 over Perillo et al. This rejection is respectfully traversed.

Claim 3 depends from claim 1, thus, claim 3 includes all the limitations of claim 1 and is believed to be allowable for least the same reasons as claim 1. The deficiencies of the Perillo et al reference relative to claim 1 are explained in the traversal of the 35 USC 102 rejection of claim 1. The addition of the alleged equivalence of a rectified AC input and a DC input from a DC source does not make up for the deficiencies of the Perillo et al reference. Accordingly, it is respectfully submitted that the relied on reference is deficient in making obvious claim 3.

Claim 19 depends from allowable claim 15 and includes all the limitations of allowable claim 15. Thus, it is believed that claim 19 is allowable for least the same reasons as claim 15. Accordingly, it is respectfully submitted that claim 19 is now allowable.

The references cited but not relied upon were reviewed and are believed not to anticipate or make obvious applicants' invention.

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CONCLUSION

Applicant(s) made an earnest attempt to place this case in condition for allowance. In view of all of the above, it is believed that the claims are allowable, and that the case is now in condition for allowance, which action is earnestly solicited.

Although it is believed that no fees are due for this amendment, the Commissioner is hereby authorized to charge any fees may be required or credit any overpayment to Deposit Account 50-1086.

If there are matters which can be discussed by telephone to further the prosecution of this Application, the Examiner is invited to call the undersigned attorney/agent at the Examiner's convenience.

Respectfully submitted,  
Alan Ball et al., by

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